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MIKE GLEASON, Chairmand MAY 19 P 12: 57

COMMISSIONERS

WILLIAM A. MUNDELL

IN THE MATTER OF THE

RULEMAKING ON NET

PROPOSED NET METERING RULES FOR THE PROPOSED

JEFF HATCH-MILLER

KRISTIN K. MAYES

GARY PIERCE

METERING



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BEFORE THE ARIZONA CORPORATION RECEIVED

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Docket No. RE-00000A-07-0608

ARIZONA PUBLIC SERVICE COMPANY'S WRITTEN COMMENTS ON NOTICE OF PROPOSED RULEMAKING REGARDING NET METERING

Arizona Public Service Company ("APS" or the "Company") hereby submits written Comments to the Arizona Corporation Commission ("Commission" or "ACC") on the Commission's Notice of Proposed Rulemaking Regarding Net Metering. APS' comments will address the following issues:

- Combined Heat and Power ("CHP") facilities, as proposed and included in 1. the definition of Net Metering Facility must be limited to renewable resources;
- IF CHP is expanded to include non-renewable fuels, CHP systems must 2. meet the efficiency standards of Qualified Facilities as defined under Public Utility Regulatory Policies Act of 1978 (PURPA").

Introduction. I.

On January 4, 2008, APS filed Comments in response to Staff's Request for Written Comments to Proposed Net Metering Rules. On February 1, 2008, Staff revised the Proposed Net Metering Rules, incorporating many of the comments of the interested parties. On February 12, 2008, APS filed comments to Staff's Revised Draft of Proposed Net Metering Rules. On February 21, 2008, Staff filed a Proposed Net Metering Order and the Proposed Net Metering Rules. On March 6, 2008, APS filed Comments to Proposed Order for the Proposed Rulemaking Regarding Net Metering. On March 20, 2008, the Commission issued Decision No. 70194 ordering the ACC Staff to prepare a Notice of Proposed Rulemaking to adopt Net Metering Rules, A.A.C. 14-2-2301 through R14-2-2308 ("Proposed Net Metering Rules").

On March 28, 2008, a Procedural Order was issued in this matter scheduling an oral proceeding to obtain public comments for June 5, 2008. The Procedural Order also requested interested parties file initial written comments on or before May 19, 2008.

II. Written Comments on Proposed Net Metering Rules

APS supports a properly designed net metering program. By properly designed, APS means a program that (1) encourages distributed renewable generation; and (2) allows recovery of costs to provide service.

1. Net Metering Facilities should be limited to renewable generation.

Because the Proposed Net Metering Rules should be designed and developed to promote renewable resources, APS continues to oppose the definition of CHP as proposed and included in the definition of Net Metering Facility pursuant to R-14-2-2302.M.3, because it would also allow for the subsidization of non-renewable energy (e.g. natural gas, diesel¹) under the guise of net metering. This would be contrary to the usual intent and purpose of net metering, which is to promote the use of renewable resources.

In fact, at the March 11, 2008 Open Meeting; several Commissioners specifically identified the promotion of renewable resources as the driver for promulgating the Proposed Net Metering Rules. Commissioner Mayes indicated that net metering is "an absolutely critical tool in the toolbox for solar energy development in the state of Arizona. And I think it will, you know, serve to make renewable energy more accessible to Arizonans." (Tr. at 209 [Commissioner Mayes]). Commissioner Hatch-Miller recognized that "access to renewable power supplies and systems is not enough by itself. You have to have the ability to hook that renewable power system up to the utility grid as a whole. So this takes us that next step." (Tr. at 209-210 [Commissioner Hatch-Miller]).

¹ APS is not proposing that this exclusion apply to facilities used for emergency purposes, i.e. in hospitals or for military bases.

Commissioner Mundell stated that "this is a major step forward for Arizona. We have worked hard on this, and I think it again puts us on the cutting edge when it comes to encouraging the use of renewable energy." (Tr. at 209-210 [Commissioner Mundell]).

In recognition of the Commission's stated intent that the purpose of net metering is to encourage the development and use of renewable energy, APS continues to recommend that the Commission adopt the definition of Renewable Combined Heat and Power ("RCHP") as previously approved by the Commission under the REST, R14-2-1802(B)(5), which defines RCHP as: ". . . a Distributed Generation system, fueled by an Eligible Renewable Energy Resource, that produces both electricity and useful renewable process heat." APS has attached a redline copy of R14-2-2302.D. that incorporates this modification. (Attachment A).

2. If Net Metering Facilities also include non-renewable fueled CHP facilities, at a minimum, such facilities must be required to meet the efficiency standards of Qualified Facilities as defined under PURPA.

If it is the Commission's desire to include non-renewable fueled CHP facilities, it is the Company's recommendation that these systems at least be required to meet the minimum efficiency standards of Qualified Facilities as defined by PURPA under 18 C.F.R. § 292.205. (A copy of C.F.R. § 292.205 is attached as Exhibit 1). It makes little public policy sense to subsidize non-renewable distributed generation that is less efficient than the utility-owned generation it would displace. APS has attached a redline copy of R14-2-2302.D. that incorporates this modification. (Attachment B).

RESPECTFULLY submitted this 19th_day of May, 2008.

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Attachment A

R14-2-2302. Definitions

For purposes of this Article, the following definitions apply unless the context requires otherwise:

"Avoided Costs" means the incremental costs to an Electric Utility for electric energy or capacity or both which, but for the purchase from the net metering facility, such utility would

generate itself or purchase from another source.

"Biomass" means any raw or processed plant-derived organic matter available on a renewable B. basis, including dedicated energy crops and trees; agricultural food and feed crops; agricultural crop wastes and residues; wood wastes and residues, including landscape waste, right of way tree trimmings, or small diameter forest thinnings that are 12 inch in diameter or less; dead and downed forest products; aquatic plants; animal wastes; other vegetative waste materials; nonhazardous plant matter waste material that is segregated from other waste; forest related resources such as harvesting and mill residue, pre-commercial thinnings, slash and brush; miscellaneous waste such as waste pellets, crates, and dunnage; or recycled paper fibers that are no longer suitable for recycled paper production, but not including painted, treated or pressurized wood, wood contaminated with plastics or metals, tires or recyclable postconsumer waste paper.

"Biogas" means gases that are derived from plant-derived organic matter, agricultural food and C. feed matter, wood wastes, aquatic plants, animal wastes, vegetative wastes or waste water treatment facilities using anaerobic digestion or from municipal solid waste through a digester

process, an oxidation process or other gasification process.

D. "Combined Heat and Power" of "CHP" (also known as cogeneration) means a system that generates electricity and useful thermal energy in a single, integrated system. "Commission" means the Arizona Corporation Commission.

"Electric Utility" or "Utility" means an electric distribution company that constructs, operates, and maintains the electrical distribution system for the receipt and/or delivery of power.

"Electric Utility Customer" or "Customer" means an end-use retail Customer served under a

Utility's rate schedule.

F.

- "Fuel Cell" means a device that converts the chemical energy of a fuel directly into electricity without intermediate combustion or thermal cycles. For purposes of these Net Metering rules, the source of the chemical reaction must be derived from Renewable Resources.
- "Geothermal" means heat from within the earth's surface.

"Hydroelectric" means the kinetic energy derived from moving water. I.

"Net Metering" means service to an Electric Utility Customer under which electric energy J. generated by or on behalf of that Electric Utility Customer from a Net Metering Facility and delivered to the Utility's local distribution facilities may be used to offset electric energy provided by the Electric Utility to the Electric Utility Customer during the applicable billing period.

"Net Metering Customer" means any Arizona Customer who chooses to take electric service in K. the manner described in the definition of Net Metering above, and under the Net Metering

tariff, as described in R14-2-2307.

"Net Metering Facility" means a facility for the production of electricity that: L.

- Is operated by or on behalf of a Net Metering Customer and is located on the Net 1. Metering Customer's premises.
- Is intended primarily to provide part or all of the Net Metering Customer's requirements 2. for electricity;

Uses Renewable Resources, a Fuel Cell, or CHPRCHP to generate electricity; 3.

Has a generating capacity less than or equal to 125% of the Net Metering Customer's total connected load, or in the absence of customer load data, capacity less than or equal to the Customer's electric service drop capacity; and

Attachment A

- 5. Is interconnected with and can operate in parallel and in phase with an Electric Utility's existing distribution system.
- M. "Renewable Resources" means natural resources that can be replenished rapidly by natural processes. Renewable Resources include Biogas, Biomass, Geothermal, Hydroelectric, Solar, or Wind.
- N. "RCHP" or "Renewable Combined Heat and Power" (also known as cogeneration) means a distributed generation system, fueled by an Eligible Renewable Energy Resource, that produces both electricity and useful renewable process heat. Qualifying RCHP systems shall meet all PURPA efficiency and effective utilization of heat production standards for a Qualifying Facility certification as set forth in 18 C.F.R § 292.205.
- O. "Solar" means solar radiation or heat from the Earth's Sun that produces electricity from a device or system designed for that purpose.
- P. "Wind" means energy derived from wind movement across the Earth's surface that produces electricity from a device or system designed for that purpose.

Attachment B

R14-2-2302. Definitions

For purposes of this Article, the following definitions apply unless the context requires otherwise:

- A. "Avoided Costs" means the incremental costs to an Electric Utility for electric energy or capacity or both which, but for the purchase from the net metering facility, such utility would generate itself or purchase from another source.
- B. "Biomass" means any raw or processed plant-derived organic matter available on a renewable basis, including dedicated energy crops and trees; agricultural food and feed crops; agricultural crop wastes and residues; wood wastes and residues, including landscape waste, right of way tree trimmings, or small diameter forest thinnings that are 12 inch in diameter or less; dead and downed forest products; aquatic plants; animal wastes; other vegetative waste materials; non-hazardous plant matter waste material that is segregated from other waste; forest related resources such as harvesting and mill residue, pre-commercial thinnings, slash and brush; miscellaneous waste such as waste pellets, crates, and dunnage; or recycled paper fibers that are no longer suitable for recycled paper production, but not including painted, treated or pressurized wood, wood contaminated with plastics or metals, tires or recyclable post-consumer waste paper.
- C. "Biogas" means gases that are derived from plant-derived organic matter, agricultural food and feed matter, wood wastes, aquatic plants, animal wastes, vegetative wastes or waste water treatment facilities using anaerobic digestion or from municipal solid waste through a digester process, an oxidation process or other gasification process.
- D. "Combined Heat and Power" of "CHP" (also known as cogeneration) means a system that generates electricity and useful thermal energy in a single, integrated system. "Commission" means the Arizona Corporation Commission. Qualifying CHP systems shall meet all PURPA efficiency and effective utilization of heat production standards for a Qualifying Facility certification as set forth in 18 C.F.R § 292.205 as promulgated at the time these rules go into effect.
- E. "Electric Utility" or "Utility" means an electric distribution company that constructs, operates, and maintains the electrical distribution system for the receipt and/or delivery of power.
- F. "Electric Utility Customer" or "Customer" means an end-use retail Customer served under a Utility's rate schedule.
- G. "Fuel Cell" means a device that converts the chemical energy of a fuel directly into electricity without intermediate combustion or thermal cycles. For purposes of these Net Metering rules, the source of the chemical reaction must be derived from Renewable Resources.
- H. "Geothermal" means heat from within the earth's surface.
- I. "Hydroelectric" means the kinetic energy derived from moving water.
- J. "Net Metering" means service to an Electric Utility Customer under which electric energy generated by or on behalf of that Electric Utility Customer from a Net Metering Facility and delivered to the Utility's local distribution facilities may be used to offset electric energy provided by the Electric Utility to the Electric Utility Customer during the applicable billing period.
- K. "Net Metering Customer" means any Arizona Customer who chooses to take electric service in the manner described in the definition of Net Metering above, and under the Net Metering tariff, as described in R14-2-2307.
- L. "Net Metering Facility" means a facility for the production of electricity that:
 - 1. Is operated by or on behalf of a Net Metering Customer and is located on the Net Metering Customer's premises.
 - 2. Is intended primarily to provide part or all of the Net Metering Customer's requirements for electricity;
 - 3. Uses Renewable Resources, a Fuel Cell, or CHP to generate electricity;

Attachment B

- 4. Has a generating capacity less than or equal to 125% of the Net Metering Customer's total connected load, or in the absence of customer load data, capacity less than or equal to the Customer's electric service drop capacity; and
- 5. Is interconnected with and can operate in parallel and in phase with an Electric Utility's existing distribution system.
- M. "Renewable Resources" means natural resources that can be replenished rapidly by natural processes. Renewable Resources include Biogas, Biomass, Geothermal, Hydroelectric, Solar, or Wind.
- N. "Solar" means solar radiation or heat from the Earth's Sun that produces electricity from a device or system designed for that purpose.
- O. "Wind" means energy derived from wind movement across the Earth's surface that produces electricity from a device or system designed for that purpose.

Exhibit 1

18 C.F.R. § 292.205

C

Effective: March 17, 2006

Code of Federal Regulations Currentness

Title 18. Conservation of Power and Water Resources

Chapter I. Federal Energy Regulatory Commission, Department of Energy

Subchapter K. Regulations Under The Public Utility Regulatory Policies Act of 1978

Part 292. Regulations Under Sections 201 and 210 of the Public Utility Regulatory Policies Act of 1978 with Regard to Small Power Production and Cogeneration. (Refs & Annos)

Subpart B. Qualifying Cogeneration and Small Power Production Facilities (Refs & Annos)

→ § 292.205 Criteria for qualifying cogeneration facilities.

- (a) Operating and efficiency standards for topping-cycle facilities--
 - (1) Operating standard. For any topping-cycle cogeneration facility, the useful thermal energy output of the facility must be no less than 5 percent of the total energy output during the 12-month period beginning with the date the facility first produces electric energy, and any calendar year subsequent to the year in which the facility first produces electric energy.
 - (2) Efficiency standard.
 - (i) For any topping-cycle cogeneration facility for which any of the energy input is natural gas or oil, and the installation of which began on or after March 13, 1980, the useful power output of the facility plus one-half the useful thermal energy output, during the 12-month period beginning with the date the facility first produces electric energy, and any calendar year subsequent to the year in which the facility first

produces electric energy, must:

- (A) Subject to paragraph (a)(2)(i)(B) of this section be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; or
- (B) If the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility.
- (ii) For any topping-cycle cogeneration facility not subject to paragraph (a)(2)(i) of this section there is no efficiency standard.
- (b) Efficiency standards for bottoming-cycle facilities.
 - (1) For any bottoming-cycle cogeneration facility for which any of the energy input as supplementary firing is natural gas or oil, and the installation of which began on or after March 13, 1980, the useful power output of the facility during the 12-month period beginning with the date the facility first produces electric energy, and any calendar year subsequent to the year in which the facility first produces electric energy must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing.
 - (2) For any bottoming-cycle cogeneration facility not covered by paragraph (b)(1) of this section, there is no efficiency standard.
- (c) Waiver. The Commission may waive any of the requirements of paragraphs (a) and (b) of this section upon a showing that the facility will produce significant energy savings.
- (d) Criteria for new cogeneration facilities. Notwithstanding paragraphs (a) and (b) of this section, any cogeneration facility that was either not certi-

fied as a qualifying cogeneration facility on or before August 8, 2005, or that had not filed a notice of self-certification, self-recertification or an application for Commission certification or Commission recertification as a qualifying cogeneration facility under § 292.207 of this chapter prior to February 2, 2006, and which is seeking to sell electric energy pursuant to section 210 of the Public Utility Regulatory Policies Act of 1978, 16 U.S.C. 824a-1, must also show:

- (1) The thermal energy output of the cogeneration facility is used in a productive and beneficial manner; and
- (2) The electrical, thermal, chemical and mechanical output of the cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.
- (3) Fundamental use test. For the purposes of satisfying paragraph (d)(2) of this section, the electrical, thermal, chemical and mechanical output of the cogeneration facility will be considered used fundamentally for industrial, commercial, or institutional purposes and not intended fundamentally for sale to an electric utility if at least 50 percent of the aggregate of such output, on an annual basis, is used for industrial, commercial, residential or institutional purposes. In addition, applicants for facilities that do not meet this safe harbor standard may present evidence to the Commission that the facilities should nevertheless be certified given state laws applicable to sales of electric energy or unique technological, efficiency, economic, and variable thermal energy requirements.
- (4) For purposes of paragraphs (d)(1) and (d)(2) of this section, a new cogeneration facil-

ity of 5 MW or smaller will be presumed to satisfy the requirements of those paragraphs.

(5) For purposes of paragraph (d)(1) of this section, where a thermal host existed prior to the development of a new cogeneration facility whose thermal output will supplant the thermal source previously in use by the thermal host, the thermal output of such new cogeneration facility will be presumed to satisfy the requirements of paragraph (d)(1).

[52 FR 28467, July 30, 1987; 60 FR 4857, Jan. 25, 1995; Order 671, 71 FR 7868, Feb. 15, 2006]

SOURCE: 44 FR 65746, Nov. 15, 1979; 45 FR 17972, March 20, 1980; 50 FR 40358, Oct. 3, 1985; 52 FR 5280, Feb. 20, 1987; 52 FR 28467, July 30, 1987; 53 FR 15381, April 29, 1988; 53 FR 27002, July 18, 1988; 53 FR 40724, Oct. 18, 1988; 57 FR 21734, May 22, 1992; 60 FR 4856, Jan. 25, 1995, unless otherwise noted.

AUTHORITY: 16 U.S.C. 791a-825r, 2601-2645; 31 U.S.C. 9701; 42 U.S.C. 7101-7352.; Public Utility Regulatory Policies Act of 1978, (16 U.S.C. 2601, et seq.), Energy Supply and Environmental Coordination Act, (15 U.S.C. 791 et seq.), Federal Power Act, as amended, (16 U.S.C. 792, et seq.), Department of Energy Organization Act, (42 U.S.C. 7101 et seq.), E.O. 12009, 42 FR 46267, Natural Gas Policy Act of 1978, (15 U.S.C. 3301, et seq.), unless otherwise noted.

18 C. F. R. § 292.205, 18 CFR § 292.205

Current through May 1, 2008; 73 FR 23981

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